



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#7/a

APPLICATION NO. 09/588,407

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INVENTOR: Richard D. Blackmore

§ EXAMINER: Steven D. Maki

TITLE: INFLATABLE HEATING
DEVICE

§ GROUP ART UNIT: 1733

FILING DATE: June 6, 2000

Box RESPONSES—FEE
Assistant Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

RECEIVED

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TC 1700

AMENDMENT

Sir:

Applicant hereby timely responds to the Office Action dated March 19, 2002. Please amend the above-identified application as follows:

In the Specification:

At page 2, line 10, please amend the paragraph beginning with "In the past" (which continues to page 3, line 2) to read as follows:

a1

In the past, flexible heaters have been produced using ferrous or metallic wires within the composition to provide heat by resistive means. While these wires are an efficient heating element, the flexibility of the heater is limited by the use of such wires. For instance, in Japan 2158323 copper wires are used as the heating elements. With the repeated inflating and deflating that would be experienced with repeated use, it is expected that the redundant load paths associated with the flexing will cause the copper wires to fail, thus losing electrical continuity and heating capability. This severely limits the life cycle of a flexible heater manufactured with metallic wires. Copper wires disposed in a flexible composition also exhibit very poor adhesion to the surrounding polymer (usually silicon) making uniform and consistent positioning of the wires within the polymer matrix, throughout the expected life cycle of the heater, difficult if not impossible. This can result in the resistance wires being redistributed within the heater in undesired arrangements. While various primers can be employed to